

GOLF

Keeping your course secure

Vandals used to be a problem at Chicasaw Country Club in the Memphis, Tenn., area. No longer.

Jim Harris, Chicasaw superintendent, has some tips on how to keep undesirables off golf courses, especially in urban areas. They focus on "preventing rather than apprehending and prosecuting."

- If an incident takes place and the culprit is not apprehended, keep it out of the media. This takes away his satisfaction.

- Have members keep valuables at home or in the locker. A number of players on his course had been robbed during rounds.

- Hire highly visible, uniformed security guards.

- Cover drain ducts with grates to keep people from crawling in through them and enclose the course in fencing with barbed wire on top if possible.

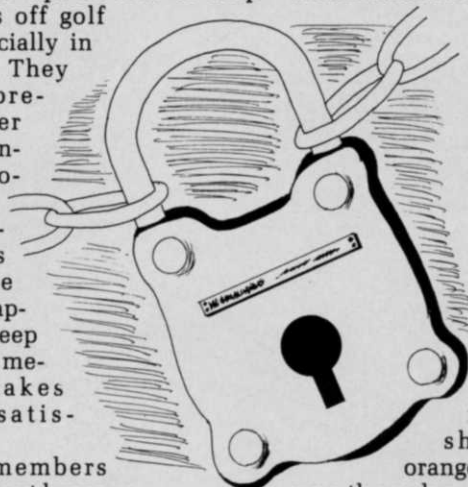
- Make sure everyone on the

course can be identified: members, maintenance crew and caddies. Uniforms for maintenance crews are a good idea, Harris says. Question any unaccounted for people on the course.

- Control all course entrances and hire 24-hour security for the front gate, closing almost all the gates.

There are, of course, some problems in taking these measures.

"Locked gates meant vendors had to go to the front office and then be let in," Harris says. Also, the pro shop couldn't sell orange shirts because this was the color given to the maintenance crew.



COMING IN JUNE

- Aquatic weed control
- Warm-season disease guide
- Aerification/dethatching



Dr. Robert Shearman

RESEARCH

Potassium prominence growing in turf care

As more research is conducted, results are showing more benefits of potassium use.

Within the turfgrass plant, potassium helps with sugar transporting, starch formation and enzyme activity. It also influences the opening and closing of stomata.

Studies conducted at the University of Nebraska on Fylking Kentucky bluegrass show that potassium increased root density and depth. "With increased potassium, wilting tendency is lower because of the decreased water use rate and deeper rooting," explains Robert Shearman,

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LANDSCAPING

'Million Dollar List' led by Environmental

Sixty-seven companies made Lawn Care Industry's second annual Million Dollar Mowers List, representing more than \$170 million in mowing/management revenue in 1987.

Mowing/management revenue is that which is billed for mowing, trimming and clean-up services. Billings specifically for chemical applications, landscape installation, design and tree/shrub care are not included.

Fourteen companies joined the list this year. Two companies dropped off. Environmental Care (Calabassas, Calif.), The Brickman Group (Long Grove, Ill.) and Lancaster Landscapes (Arlington, Va.) held their respective first, second and third place rankings

LAWN CARE INDUSTRY

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from last year. The rest of the top 10: 4. Northwest Landscape Industries (Tigard, Ore.), 5. Oyler Brothers (Orlando, Fla.), 6. (tie) Maintain (Dallas, Texas) and Cagwin & Dorward (Novato, Calif.) 8. Las Colinas Landscape Services (Dallas, Texas), 9. AAA Lawn Industries (Tucker, Ga.), 10. (tie) Shearon Environmental Design (Plymouth Meeting, Pa.), Pampered Lawns (Houston, Texas).

The companies averaged approximately 20 percent growth over 1986.

Company representatives attribute the growth to a continually wider demand for their services.

"I think developers are more aware of the need for curb appeal, selling their project as the people are walking in the door," says Scot Davis of Davis Landscape Contractors.

"Maintenance is a market that's really growing," adds Wayne Richards of Cagwin & Dorward.

—Elliot Maras

POTASSIUM from page 11

Ph.D. of Nebraska.

With this comes the ability to manipulate irrigation strategies, he says. Watering daily in light amounts lowered root density while watering deeply twice a week helped rooting. Adding potassium increased root density with both watering methods, Shearman says.

Recommendations are to apply potassium at equal rates with nitrogen. "Potassium uptake is proportional to nitrogen application," Shearman says. The lower the nitrogen application, the lower the potassium uptake.

"Potassium remains in the ionic form in the plant cell," says Shearman. He notes that evidence of potassium deficiency include older leaf tip and margin burn, reduced root and foliage growth and lower leaf tensile strength.

In addition, plants show an increased tendency to wilt and higher water use rate, which makes the plant more susceptible to stress. "In the end, it will affect the playability of golf turf," he says.

LM technical advisor Shearman spoke on potassium benefits at the Western Pennsylvania Turf Conference in February.

PESTICIDES

Kelthane returns to the shelves in 1988

Kelthane 35 miticide from Rohm and Haas is returning this year for use on ornamentals, flowers and turf, the company announced. EPA restored registration on Dec. 31, 1987.

EPA originally withdrew registration in 1986 because of DDT-related impurities in the miticide, according to the company. Concern arose over the affects of the miticide on birds. However, after an environmental impact study of Kelthane products, EPA concluded that the miticide posed no unacceptable risk to avian species.

In complying with EPA requirements, Rohm and Haas invested in manufacturing improvements to keep DDT-related impurities in Kelthane production under 2.5 percent, according to the company.

TURF

Is biological disease control imminent?

If research continues at its current

rate, dollar spot might be controlled by a bacterium, not a chemical. "I think there will be a breakthrough soon," says Lee Burpee, Ph.D., at the University of Guelph in Ontario, Canada.

Burpee defines biological control as "the suppression of a plant disease through activity of an organism other than man." Biological control falls into two categories:

1. The application of an organism to a plant, such as a bacteria, fungi or virus.

2. The manipulation of the soil and plant environment to enhance the development of suppressive microbes.

Burpee's research has focused on bacterium control of dollar spot and fungi control of snow mold. Burpee tracked down the fungus by finding what appeared naturally on turf leaves.

"What you may be seeing is suppression in the field," Burpee says. "It could be worse without the fungus."

With the fungus, Burpee got a great deal of disease suppression. "There wasn't a significant difference from the use of a chemical control."

The future of biological control is strong. The two areas for improve-

THE ATTRACTION IS

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